



ENTERED

OIPE

## RAW SEQUENCE LISTING

DATE: 02/28/2002

PATENT APPLICATION: US/10/072,571

TIME: 12:43:39

Input Set : A:\C-2789\_6-US sequence listing.txt

Output Set: N:\CRF3\02282002\J072571.raw

## SEQUENCE LISTING

4 (1) GENERAL INFORMATION:  
6 (i) APPLICANT: Abrams, Mark A.  
7 Bauer, S. C.  
8 Braford-Goldberg, Sarah R.  
9 Caparon, Maire H.  
10 Easton, Alan M.  
11 Klein, Barbara K.  
12 McKearn, John P.  
13 Olins, Peter O.  
14 Paik, Kumnan  
15 Thomas, John W.  
17 (ii) TITLE OF INVENTION: Co-administration of Interleukin-3  
18 Mutant Polypeptides with CSF's for Multi-lineage  
19 Hematopoietic Cell Production  
21 (iii) NUMBER OF SEQUENCES: 58  
23 (iv) CORRESPONDENCE ADDRESS:  
24 (A) ADDRESSEE: S. Christopher Bauer, Pharmacia Corp.  
25 Corporate Patent Dept.  
26 (B) STREET: 800 N. Lindbergh  
27 (C) CITY: St. Louis  
28 (D) STATE: Missouri  
29 (E) COUNTRY: USA  
30 (F) ZIP: 63167  
32 (v) COMPUTER READABLE FORM:  
33 (A) MEDIUM TYPE: Floppy disk  
34 (B) COMPUTER: IBM PC compatible  
35 (C) OPERATING SYSTEM: PC-DOS/MS-DOS  
36 (D) SOFTWARE: PatentIn Release #1.0, Version #1.25  
38 (vi) CURRENT APPLICATION DATA:  
C--> 39 (A) APPLICATION NUMBER: US/10/072,571  
C--> 40 (B) FILING DATE: 08-Feb-2002  
41 (C) CLASSIFICATION:  
51 (vii) PRIOR APPLICATION DATA:  
44 (A) APPLICATION NUMBER: US 08/446,871  
45 (B) FILING DATE: 06-JUN-1995  
48 (A) APPLICATION NUMBER: PCT/US95/01184  
49 (B) FILING DATE: 02-FEB-1995  
52 (A) APPLICATION NUMBER: US 08/193,373  
53 (B) FILING DATE: 04-FEB-1994  
55 (viii) ATTORNEY/AGENT INFORMATION:  
56 (A) NAME: Bauer, S. Christopher Bauer  
57 (B) REGISTRATION NUMBER: 42,305

## RAW SEQUENCE LISTING

DATE: 02/28/2002

PATENT APPLICATION: US/10/072,571

TIME: 12:43:39

Input Set : A:\C-2789\_6-US sequence listing.txt

Output Set: N:\CRF3\02282002\J072571.raw

```

58          (C) REFERENCE/DOCKET NUMBER: C-2789/6
60      (ix) TELECOMMUNICATION INFORMATION:
61          (A) TELEPHONE: (636)737-6257
62          (B) TELEFAX: (636)737-5452
65 (2) INFORMATION FOR SEQ ID NO: 1:
67      (i) SEQUENCE CHARACTERISTICS:
68          (A) LENGTH: 133 amino acids
69          (B) TYPE: amino acid
70          (D) TOPOLOGY: linear
72      (ii) MOLECULE TYPE: peptide
75      (ix) FEATURE:
76          (A) NAME/KEY: Modified-site
77          (B) LOCATION: 1
78          (D) OTHER INFORMATION: /note= "Met- may or may not precede the
79 amino acid in position 1"
81      (ix) FEATURE:
82          (A) NAME/KEY: Modified-site
83          (B) LOCATION: 17
84          (D) OTHER INFORMATION: /note= "Xaa at position 17 is Ser,
85 Lys, Gly, Asp, Met, Gln, or Arg"
87      (ix) FEATURE:
88          (A) NAME/KEY: Modified-site
89          (B) LOCATION: 18
90          (D) OTHER INFORMATION: /note= "Xaa at position 18 is Asn,
91 His, Leu, Ile, Phe, Arg, or Gln"
93      (ix) FEATURE:
94          (A) NAME/KEY: Modified-site
95          (B) LOCATION: 19
96          (D) OTHER INFORMATION: /note= "Xaa at position 19 is Met,
97 Phe, Ile, Arg, Gly, Ala, or Cys"
99      (ix) FEATURE:
100          (A) NAME/KEY: Modified-site
101          (B) LOCATION: 20
102          (D) OTHER INFORMATION: /note= "Xaa at position 20 is Ile,
103 Cys, Gln, Glu, Arg, Pro, or Ala"
105      (ix) FEATURE:
106          (A) NAME/KEY: Modified-site
107          (B) LOCATION: 21
108          (D) OTHER INFORMATION: /note= "Xaa at position 21 is Asp,
109 Phe, Lys, Arg, Ala, Gly, Glu, Gln, Asn, Thr, Ser,
110 or Val"
112      (ix) FEATURE:
113          (A) NAME/KEY: Modified-site
114          (B) LOCATION: 22
115          (D) OTHER INFORMATION: /note= "Xaa at position 22 is Glu,
116 Trp, Pro, Ser, Ala, His, Asp, Asn, Gln, Leu, Val,
117 or Gly"
119      (ix) FEATURE:
120          (A) NAME/KEY: Modified-site

```

## RAW SEQUENCE LISTING

DATE: 02/28/2002

PATENT APPLICATION: US/10/072,571

TIME: 12:43:39

Input Set : A:\C-2789\_6-US sequence listing.txt

Output Set: N:\CRF3\02282002\J072571.raw

```

121          (B) LOCATION: 23
122          (D) OTHER INFORMATION: /note= "Xaa at position 23 is Ile,
123 Val, Ala, Leu, Gly, Trp, Lys, Phe, Ser, or
124 Arg"
126      (ix) FEATURE:
127          (A) NAME/KEY: Modified-site
128          (B) LOCATION: 24
129          (D) OTHER INFORMATION: /note= "Xaa at position 24 is Ile,
130 Gly, Val, Arg, Ser, Phe, or Leu"
132      (ix) FEATURE:
133          (A) NAME/KEY: Modified-site
134          (B) LOCATION: 25
135          (D) OTHER INFORMATION: /note= "Xaa at position 25 is Thr,
136 His, Gly, Gln, Arg, Pro, or Ala"
138      (ix) FEATURE:
139          (A) NAME/KEY: Modified-site
140          (B) LOCATION: 26
141          (D) OTHER INFORMATION: /note= "Xaa at position 26 is His,
142 Thr, Phe, Gly, Arg, Ala, or Trp"
144      (ix) FEATURE:
145          (A) NAME/KEY: Modified-site
146          (B) LOCATION: 27
147          (D) OTHER INFORMATION: /note= "Xaa at position 27 is Leu,
148 Gly, Arg, Thr, Ser, or Ala"
150      (ix) FEATURE:
151          (A) NAME/KEY: Modified-site
152          (B) LOCATION: 28
153          (D) OTHER INFORMATION: /note= "Xaa at position 28 is Lys,
154 Arg, Leu, Gln, Gly, Pro, Val, or Trp"
156      (ix) FEATURE:
157          (A) NAME/KEY: Modified-site
158          (B) LOCATION: 29
159          (D) OTHER INFORMATION: /note= "Xaa at position 29 is Gln,
160 Asn, Leu, Pro, Arg, or Val"
162      (ix) FEATURE:
163          (A) NAME/KEY: Modified-site
164          (B) LOCATION: 30
165          (D) OTHER INFORMATION: /note= "Xaa at position 30 is Pro,
166 His, Thr, Gly, Asp, Gln, Ser, Leu, or Lys"
168      (ix) FEATURE:
169          (A) NAME/KEY: Modified-site
170          (B) LOCATION: 31
171          (D) OTHER INFORMATION: /note= "Xaa at position 31 is Pro,
172 Asp, Gly, Ala, Arg, Leu, or Gln"
174      (ix) FEATURE:
175          (A) NAME/KEY: Modified-site
176          (B) LOCATION: 32
177          (D) OTHER INFORMATION: /note= "Xaa at position 32 is Leu,
178 Val, Arg, Gln, Asn, Gly, Ala, or Glu"

```

## RAW SEQUENCE LISTING

DATE: 02/28/2002

PATENT APPLICATION: US/10/072,571

TIME: 12:43:39

Input Set : A:\C-2789\_6-US sequence listing.txt

Output Set: N:\CRF3\02282002\J072571.raw

```

180      (ix) FEATURE:
181          (A) NAME/KEY: Modified-site
182          (B) LOCATION: 33
183          (D) OTHER INFORMATION: /note= "Xaa at position 33 is Pro,
184 Leu, Gln, Ala, Thr, or Glu"
186      (ix) FEATURE:
187          (A) NAME/KEY: Modified-site
188          (B) LOCATION: 34
189          (D) OTHER INFORMATION: /note= "Xaa at position 34 is Leu,
190 Val, Gly, Ser, Lys, Glu, Gln, Thr, Arg, Ala, Phe,
191 Ile, or Met"
193      (ix) FEATURE:
194          (A) NAME/KEY: Modified-site
195          (B) LOCATION: 35
196          (D) OTHER INFORMATION: /note= "Xaa at position 35 is Leu,
197 Ala, Gly, Asn, Pro, Gln, or Val"
199      (ix) FEATURE:
200          (A) NAME/KEY: Modified-site
201          (B) LOCATION: 36
202          (D) OTHER INFORMATION: /note= "Xaa at position 36 is Asp,
203 Leu, or Val"
205      (ix) FEATURE:
206          (A) NAME/KEY: Modified-site
207          (B) LOCATION: 37
208          (D) OTHER INFORMATION: /note= "Xaa at position 37 is Phe,
209 Ser, Pro, Trp, or Ile"
211      (ix) FEATURE:
212          (A) NAME/KEY: Modified-site
213          (B) LOCATION: 38
214          (D) OTHER INFORMATION: /note= "Xaa at position 38 is Asn,
215 or Ala"
217      (ix) FEATURE:
218          (A) NAME/KEY: Modified-site
219          (B) LOCATION: 40
220          (D) OTHER INFORMATION: /note= "Xaa at position 40 is Leu,
221 Trp, or Arg"
223      (ix) FEATURE:
224          (A) NAME/KEY: Modified-site
225          (B) LOCATION: 41
226          (D) OTHER INFORMATION: /note= "Xaa at position 41 is Asn,
227 Cys, Arg, Leu, His, Met, or Pro"
229      (ix) FEATURE:
230          (A) NAME/KEY: Modified-site
231          (B) LOCATION: 42
232          (D) OTHER INFORMATION: /note= "Xaa at position 42 is Gly,
233 Asp, Ser, Cys, Asn, Lys, Thr, Leu, Val, Glu, Phe, Tyr,
234 Ile, Met, or Ala"
236      (ix) FEATURE:
237          (A) NAME/KEY: Modified-site

```

## RAW SEQUENCE LISTING

DATE: 02/28/2002

PATENT APPLICATION: US/10/072,571

TIME: 12:43:39

Input Set : A:\C-2789\_6-US sequence listing.txt

Output Set: N:\CRF3\02282002\J072571.raw

238 (B) LOCATION: 43  
239 (D) OTHER INFORMATION: /note= "Xaa at position 43 is Glu,  
240 Asn, Tyr, Leu, Phe, Asp, Ala, Cys, Gln, Arg, Thr, Gly,  
241 or Ser"  
243 (ix) FEATURE:  
244 (A) NAME/KEY: Modified-site  
245 (B) LOCATION: 44  
246 (D) OTHER INFORMATION: /note= "Xaa at position 44 is Asp,  
247 Ser, Leu, Arg, Lys, Thr, Met, Trp, Glu, Asn, Gln, Ala,  
248 or Pro"  
250 (ix) FEATURE:  
251 (A) NAME/KEY: Modified-site  
252 (B) LOCATION: 45  
253 (D) OTHER INFORMATION: /note= "Xaa at position 45 is Gln,  
254 Pro, Phe, Val, Met, Leu, Thr, Lys, Trp, Asp, Asn, Arg,  
255 Ser, Ala, Ile, Glu, or His"  
257 (ix) FEATURE:  
258 (A) NAME/KEY: Modified-site  
259 (B) LOCATION: 46  
260 (D) OTHER INFORMATION: /note= "Xaa at position 46 is Asp,  
261 Phe, Ser, Thr, Cys, Glu, Asn, Gln, Lys, His, Ala, Tyr,  
262 Ile, Val, or Gly"  
264 (ix) FEATURE:  
265 (A) NAME/KEY: Modified-site  
266 (B) LOCATION: 47  
267 (D) OTHER INFORMATION: /note= "Xaa at position 47 is Ile,  
268 Gly, Val, Ser, Arg, Pro, or His"  
270 (ix) FEATURE:  
271 (A) NAME/KEY: Modified-site  
272 (B) LOCATION: 48  
273 (D) OTHER INFORMATION: /note= "Xaa at position 48 is Leu,  
274 Ser, Cys, Arg, Ile, His, Phe, Glu, Lys, Thr, Ala, Met,  
275 Val, or Asn"  
277 (ix) FEATURE:  
278 (A) NAME/KEY: Modified-site  
279 (B) LOCATION: 49  
280 (D) OTHER INFORMATION: /note= "Xaa at position 49 is Met,  
281 Arg, Ala, Gly, Pro, Asn, His, or Asp"  
283 (ix) FEATURE:  
284 (A) NAME/KEY: Modified-site  
285 (B) LOCATION: 50  
286 (D) OTHER INFORMATION: /note= "Xaa at position 50 is Glu,  
287 Leu, Thr, Asp, Tyr, Lys, Asn, Ser, Ala, Ile, Val, His,  
288 Phe, Met, or Gln"  
290 (ix) FEATURE:  
291 (A) NAME/KEY: Modified-site  
292 (B) LOCATION: 51  
293 (D) OTHER INFORMATION: /note= "Xaa at position 51 is Asn,  
294 Arg, Met, Pro, Ser, Thr, or His"

## VERIFICATION SUMMARY

PATENT APPLICATION: US/10/072,571

DATE: 02/28/2002

TIME: 12:43:40

Input Set : A:\C-2789\_6-US sequence listing.txt

Output Set: N:\CRF3\02282002\J072571.raw

L:39 M:220 C: Keyword misspelled or invalid format, [(A) APPLICATION NUMBER:]  
L:40 M:220 C: Keyword misspelled or invalid format, [(B) FILING DATE:]  
L:744 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1  
L:747 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1  
L:750 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1  
L:753 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1  
L:756 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1  
L:759 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1  
L:762 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1  
L:896 M:220 C: Keyword misspelled or invalid format, [(D) OTHER INFORMATION:]  
L:927 M:220 C: Keyword misspelled or invalid format, [(D) OTHER INFORMATION:]  
L:1147 M:220 C: Keyword misspelled or invalid format, [(D) OTHER INFORMATION:]  
L:1217 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2  
L:1220 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2  
L:1223 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2  
L:1226 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2  
L:1229 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2  
L:1232 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2  
L:1235 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2  
L:1553 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3  
L:1556 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3  
L:1559 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3  
L:1562 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3  
L:1565 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3  
L:1568 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3  
L:1571 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3  
L:2252 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4  
L:2255 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4  
L:2258 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4  
L:2261 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4  
L:2264 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4  
L:2267 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4  
L:2270 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4  
L:2311 M:220 C: Keyword misspelled or invalid format, [(D) OTHER INFORMATION:]  
L:2652 M:220 C: Keyword misspelled or invalid format, [(D) OTHER INFORMATION:]  
L:2717 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5  
L:2720 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5  
L:2723 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5  
L:2726 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5  
L:2729 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5  
L:2732 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5  
L:2735 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5  
L:3047 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6  
L:3050 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6  
L:3053 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6  
L:3056 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6  
L:3059 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6  
L:3062 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6

## VERIFICATION SUMMARY

DATE: 02/28/2002

PATENT APPLICATION: US/10/072,571

TIME: 12:43:40

Input Set : A:\C-2789\_6-US sequence listing.txt

Output Set: N:\CRF3\02282002\J072571.raw

L:3065 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6  
L:3094 M:220 C: Keyword misspelled or invalid format, [(D) OTHER INFORMATION:]  
L:3141 M:220 C: Keyword misspelled or invalid format, [(B) LOCATION:]  
L:3357 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7  
L:3360 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7  
L:3363 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7  
L:3366 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7  
L:3369 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7  
L:3372 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7  
L:3375 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7  
L:3422 M:220 C: Keyword misspelled or invalid format, [(A) NAME/KEY:]  
L:3482 M:220 C: Keyword misspelled or invalid format, [(B) LOCATION:]  
L:3500 M:220 C: Keyword misspelled or invalid format, [(B) LOCATION:]  
L:3576 M:220 C: Keyword misspelled or invalid format, [(B) LOCATION:]  
L:3671 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8